

List of Claims:

1. (currently amended): A cable system comprising a major trunk and a plurality of feeder lines, each of said feeder lines being connected between a node and a feeder line end, each of said feeder lines including a plurality of taps and a two-way communication device connected to each of said taps, each of said feeder lines including bi-directional amplifiers for passing signals in a high frequency band forward from a cable headend to said two-way communication devices and for passing "return" signals in a low frequency band to said headend, said two way communication devices being configured to both receive and transmit in said high frequency band, each of said feeder line ends including a receiver for receiving transmissions in said high frequency band and a means for converting signals in said high frequency band to signals in said low frequency band and applying to the corresponding one of said feeder lines the signals in the low frequency band , wherein the connection between each of said two-way communication device and said feeder line also includes a high pass filter.

2. (original): A cable system as in claim 1 wherein said feeder line end also includes a means for amplifying signals in said low frequency band.

3. (previously presented): A cable system as in claim 1 wherein both of said two-way communication devices and said headend transmit in said high frequency band.

4. (canceled):

5. (original): A cable system as in claim 1 wherein at least one of said feeder lines includes an auxiliary feeder line, said auxiliary feeder line including a band stop filter.

6. (currently amended): A cable system as in claim 1 wherein at least one of said feeder lines includes an auxiliary feeder line, said auxiliary feeder line including a band stop filter.

7. (original): A cable system as in claim 1 wherein said two-way communication devices include set-top boxes.

8. (currently amended): A cable system as in claim 1 wherein said two-way communication devices include set-top boxes.

9. (previously presented): A system comprising a major trunk and a plurality of feeder lines connected between said trunk and respective feeder line ends, each of said feeder line ends including a receiver for signals in a high frequency band, said system including a headend connected to said trunk via a return node and two-way communication devices connected to said feeder lines, both said headend and said two-way communication devices being configured to transmit signals in a high frequency band, said feeder lines including bi-directional amplifiers which pass signals forward to said two-way communication devices only in said high frequency band and pass return signals to said headend only in said low frequency band, said feeder line ends including first means for receiving signals in said high frequency band and a second means for transmitting said signals in said low frequency band along a corresponding feeder line.

10. (previously presented): A system as in claim 9 wherein said two way communication devices comprise set-top boxes.

11. (original): A system as in claim 9 wherein said first means comprises a receiver of signals in said high frequency band and second means for generating signals for transmitting in said low frequency band.

12. (original): A system as in claim 9 wherein said second means comprises a high to low frequency converter and a transmitter for transmitting signals in said low frequency band.

13. (previously presented): A cable system including a cable headend and a major trunk, said trunk having at least one tap there along, said system having at least one feeder line connected between said tap and a feeder line end, said feeder line including at least one set-top box, said set-top-box and said cable headend being configured to transmit signals in different portions of a high frequency band.

14. (original): A cable system as in claim 13 wherein said headend is configured to receive signals only in a low frequency band and transmit signals in said high frequency band.

15. (previously presented): A cable system as in claim 14 wherein said cable system includes means for including a notch in said high frequency band in which said headend does not transmit, said set-top box being configured for transmitting in said notch.

16. (original): A cable system as in claim 15 comprising a plurality of feeder lines each having a feeder line end wherein each of said feeder line ends includes a receiver for signals transmitted in said notch and means responsive to said signals for re-transmitting said signals in said low frequency band.

17. (previously presented): A cable system as in claim 16 wherein said means responsive to said signals for retransmitting said signals in said low frequency band comprises a high-to-low frequency converter and a receiver of signals in said notch.

18. (canceled):

19. (canceled):

20. (canceled):

21. (previously presented): A cable system comprising a cable headend, a return node and a plurality of feeder lines, each of said feeder lines being connected between said return node and a feeder line end, each of said feeder lines including a plurality of taps, a plurality of two-way communication devices connected to said taps, said cable headend and said two-way communication devices being configured to transmit in a high frequency band, each of said feeder line ends including first means for receiving transmissions in said high frequency band and second means for re-transmitting the received transmissions in a low frequency band along the corresponding feeder line.

22. (previously presented): A cable system as in claim 21 wherein said cable headend is configured to receive transmissions only in said low frequency band and said feeder lines include means for amplifying transmissions in said high frequency band only in a first direction towards said feeder line ends and for amplifying transmissions in said low frequency band only in a second direction towards said cable headend.

23. (previously presented): A cable system as in claim 22 also including a major trunk, said feeder lines being connected to said major trunk, said major trunk also including first and second amplifiers for amplifying transmissions in said high and low

frequency bands in said first and second directions towards said cable headend and said feeder line ends respectively.

24. (previously presented): A cable system as in claim 21 wherein said major trunk extends from a return node to a trunk end and said return node includes a return laser and is connected to said headend via a fiber optic cable.

25. (original): A cable system as in claim 21 wherein said first and second means include a receiver and a high-to-low frequency converter respectively.

26. (canceled):

27. (previously presented): A cable system as in claim 21 including an auxiliary feeder line extending from a tap in one of said feeder lines to a (auxiliary) feeder line end, said auxiliary feeder line including a band stop filter, said auxiliary feeder line also including a receiver and a high-to-low frequency converter at the auxiliary feeder line end.

28. (original): A cable system as in claim 21 wherein said two-way communication devices comprise set-top boxes.

29. (previously presented): A cable system as in claim 21 wherein said cable headend is configured to transmit in said high frequency band except for a notch portion therein, and said two way communication device is configured to transmit in said notch portion.

30. (previously presented): A cable system as in claim 28 wherein said cable headend is configured to transmit in said high frequency band except for a notch portion therein, and said set-top box is configured to transmit in said notch portion.

31. (previously presented): A cable system as in claim 29 wherein said two way communication device includes a band stop filter with an associated receiver of signals from said headend, said two way communication device also including a band pass filter and an associated transmitter.

32. (original): A cable system as in claim 30 wherein said set-top box includes a band stop filter with an associated receiver of signals from said headend, said set-top box also including a band pass filter and an associated transmitter.

33. (canceled):

34. (canceled):

35. (canceled):

36. (canceled):

37. (canceled):

38. (previously presented): A system as in claim 9 in which said two way communication device is connected to a cable system by a high pass filter.

39. (original): A cable system as in claim 38 also including reverse amplifiers that pass signals in the low frequency band blocked by said high pass filter.

40. (previously presented): A cable system as in claim 38 also including reverse amplifiers that pass signals towards the headend in second frequency band blocked by the said high pass filter.

41. (original): A cable system as in claim 38 also including means for receiving signals in said first frequency band at the feeder line end and a means for converting signals received in the said first frequency band into signals in the second frequency band.

- 42. (canceled):
- 43. (canceled):
- 44. (canceled):
- 45. (canceled):
- 46. (canceled):
- 47. (canceled):
- 48. (canceled):
- 49. (canceled):
- 50. (canceled):
- 51. (previously canceled)
- 52. (previously canceled)